

REMARKS

The drawings have been objected to for the reasons stated in section 1 on page 2 of the Office Action and by a separately submitted Submission of Additional Drawing Figure, new Figure 7 has been added. In addition, the specification has been revised so as to refer to this new drawing figure. It is submitted that no new matter has been added.

Applicants are pleased to note that the Examiner has allowed claims 10 and 4-6.

Claims 11-18 have been rejected under 35 USC 103 as obvious over Danov in view of Ishitoko et al. for the reasons stated in sections 3-7 on pages 2-4 of the Office Action. By this Amendment, claims 12 and 16-18 have been canceled without prejudice or disclaimer of their subject matter and it is submitted that claims 11 and 13-15 are patentable over the proposed combination of references for the following reasons:

Claim 11 recites a piezoelectric transformer comprising: "a cross-shaped input electrode and an output electrode separated from the input electrode by a predetermined constant distance at a peripheral region on the first face so that its size at the central region of each side is smaller than its size at the corner region" (emphasis added).

On the other hand, such input electrodes are not disclosed in either cited reference. For example, Ishitoko et al. only discloses a cross-shaped electrode but does not teach or suggest that the electrodes reduce stress damage when the electrode has its size at the central region of each side smaller than its size at the corner region (see Figures 12 and 22 of Ishitoko et al.). Rather, the cross-shaped electrodes of Ishitoko et al. appeared to extend over the entire length of the vibrating arms.

Furthermore, the transformer of Danov corresponds to the prior art discussed in the present specification. For example, the center illustration of Figure 1 of Danov corresponds to Figure 1A of the present application.

Even assuming arguendo that it would be obvious to substitute the cross-shaped electrodes of Ishitoko et al. for the rhombic input electrode of Danov, there is no teaching or suggestion in either reference supporting "the input electrode being disposed closer to a central region of each side than to a corner region on the first face of the piezoelectric block" as recited in claim 11.

Furthermore, there is no teaching or suggestion or incentive in either reference supporting the combination proposed by the Examiner. That is, the electrodes disclosed by Ishitoko et al. are designed to be suitable for the shape of the vibrating arm for the purpose of determining angular velocity centered around axes in two directions.

Still furthermore, Ishitoko et al. and Danov are classified in entirely different search areas and do not constitute analogous art. A vibrating gyroscope is entirely unrelated to a converter having a piezoelectric transformer.

In addition, neither Ishitoko et al. nor Danov even considers the technical problems associated with the generation of heat near the central region of each side of the piezoelectric block, such a causing damage to the piezoelectric transformer. The generation of heat is not even discussed in either reference and accordingly, disposing the output electrode according to the recitation of claim 11 would not be obvious from either reference.

In view of the above, it is submitted that claims 11 and 13-15 are patentable over the proposed combination of references.

No other issues remaining, reconsideration and favorable action upon all of the claims now present in the application is respectfully requested.

Please charge any fees or credit any overpayment to Deposit Account No. 07-1337.

Respectfully submitted,

LOWE HAUPTMAN GILMAN & BERNER, LLP



Henry M. Zykorie
Registration No. 27,477

Date: March 11, 2003
1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314
(703) 684-1111
(703) 518-5499 Facsimile
BJH/HMZ:sbs

**VERSION OF AMENDED SPECIFICATION
SHOWING CHANGES MADE**

Page 5, after paragraph 8, please insert the following new paragraph:

--FIG. 7 is a view showing the structure of a piezoelectric transformer for a fluorescent lamp according to still another embodiment of the present invention.--

Page 8, second full paragraph, please amend to read as follows:

-- In the piezoelectric transformer of the present invention, as described above, the electrode at the central region of each side of the piezoelectric block has a smaller size than that of the electrode at the corner region. The input electrode can be formed in various shapes such as a diamond, rhombic, or cross shape. For example, the input electrode 303 can be formed in a cross shape as shown in Fig. 7. Further, the input electrode 303 at the central region of each side of the piezoelectric block 301 is smaller in size than that of the electrode at the corner region. The output electrode 305 is separated from the input electrode 303 by a predetermined constant distance at the peripheral region so that its size at the central region of each side is smaller than its size at the corner region.